



# Lawrence Livermore National Laboratory

HEALTH AND ECOLOGICAL ASSESSMENT DIVISION

January 5, 2000

Mr. R. Thomas Bell  
U.S. Department of Energy  
Office of International Health Programs, EH-63/270CC  
19901 Germantown Road  
Germantown, MD 20874-1290

Dear Tom:

The following information is for the April/May 2000 field trip to Bikini and Rongelap Atolls.

**Personnel:**

**LLNL**

Bill Robison, Terry Hamilton, Marshall Stuart, Jim Brunk, Steve Kehl, and Frank Gouveia

Marshallese assistants for LLNL

**Marshallese Support Staff for Bikini and Rongelap**

Willimat Riklon, Marshall Helyes, Jasper Riklon, and Matt Iasah

We will need four people for Bikini/Rongelap support for the entire mission. If any one of these people is unavailable, we will need a replacement. I am assuming that Ringo will also be available at Bikini.

**Marshallese and Bechtel Support Staff for Rongelap**

Wayne, Judy, and one Marshallese support staff. It would be nice if Capelle were on Rongelap during our mission. He is familiar with a lot of our field work and could be of great value to Terry and me during the Rongelap portion of the mission.

UNIVERSITY OF FLORIDA

Earl Stone (Bikini only)

BECHTEL

Leo Migvar (Bikini only)

**Tasks: Bikini Atoll**

1. Collect samples from HEJ, B1 & B4 well sites, breadfruit, and permanent trees (controls & K-treated).
2. Collect ground water samples from old and new wells at Bikini Island.
3. Fertilize selected experiments (HEJ).
4. Continue selected experiments on Pu transport and availability.
5. Continue testing method for collecting Pu in water.
6. Collect water samples from the five lysimeters, and install two new stainless steel lysimeter.
7. Coconut tree core K analysis study with grid and correlation.
8. Take salinity measurements in slotted wells.
9. Collect and replant study plots for IAEA CRP if required.
10. Upgrade met station on Bikini and Eneu Islands.
11. Collect soil cores from lysimeters 8 and 9.
12. GPS data for all sample trees and test plots, and perimeter of Bikini Island.

**Tasks: Rongelap Atoll**

1. Reestablish grid in the soil-excavation area with the GPS.
2. Take GPS coordinates of island perimeter.
3. Take gamma spectroscopy measurements at the reestablished grid points in area of soil removal.
4. Suspension study of salt spray across the island.
  - 4 Hi-volume air samplers—1.5 amps each
  - 4 Impinger motors—about 0.5 amps each
  - All these samplers will run continuously for about 14–15 days.
5. 50 cm soil cores around coconut trees where we took trunk tube-cores.
6. Collect coconut samples from selected coco trees in the excavation area if any exist.
7. Soil profiles in excavated area.

**Schedule**

The LCU (Great Bridge) will depart for Bikini on April 18, 2000 for Bikini and then Rongelap. We will be at Bikini a minimum time to off load (the freezer van will be off loaded at Bikini) and backload any gear for Rongelap. We want to maximize our time at Rongelap and leave Bikini as soon as possible.

**Terry Hamilton, Marshall Stuart, and Frank Gouveia**

Sunday, April 16—San Francisco to Honolulu (US Day)

Monday, April 17—Honolulu to Kwajalein (US Day, Continental)

Wednesday, April 19—LCU to Rongelap (MI Day) (Above personnel will go on the LCU or by AMI when we find out the AMI flight schedule to Rongelap)

About May 5 or 6—Rongelap to Bikini (MI Day, AMI)

Wednesday, May 17—Bikini to Kwajalein (MI Day, AMI)

Wednesday, May 17—Kwajalein to Honolulu (MI Day, Continental)

Steve Kehl and Jim Brunk

Sunday, April 16—San Francisco to Honolulu (US Day)

Monday, April 17—Honolulu to Kwajalein (US Day)

Wednesday, April 19—(MI Day, LCU to Rongelap) (Above personnel will go on the LCU or by AMI when we know the AMI flight schedule to Rongelap)

About May 5 or 6—Rongelap to Kwajalein (MI Day, AMI)

About May 5 or 6—Kwajalein to Honolulu (MI Day, First available flight to Honolulu, either Continental or Aloha)

Bill Robison

Sunday, April 16—San Francisco to Honolulu (US Day)

Monday, April 17—Honolulu to Kwajalein (US Day)

About Wednesday, April 19—Kwajalein to Rongelap (MI Day, AMI flight)

About Wednesday, April 26—Rongelap to Bikini (MI Day, AMI flight)

Wednesday, May 17—Bikini to Kwajalein (MI Day, AMI)

Wednesday, May 17—Kwajalein to Honolulu (MI Day, Continental)

Earl Stone and Leo Migvar

Monday, May 1—Honolulu to Kwajalein (US Day)

Wednesday, May 3—Kwajalein to Bikini (MI Day, AMI)

Wednesday, May 17—Bikini to Kwajalein (MI Day, AMI)

Wednesday, May 17—Kwajalein to Honolulu (MI Day, Continental)

Lodging:

Outgoing

Honolulu: Hilton Hawaiian Village

*Bill Robison, Terry Hamilton, Marshall Stuart, Jim Brunk, Steve Kehl, and Frank Gouveia*

Sunday, April 16

*Earl Stone*

Sunday, April 30

Incoming

*Steve Kehl, and Jim Brunk*

May ?—Depends on the AMI flight schedule out of Rongelap to Kwajalein and subsequent flight to Honolulu.

*Bill Robison, Terry Hamilton, Frank Gouveia, and Earl Stone*

Wednesday, May 17 (M.I. Day; arrival 0200 Wednesday morning May 17, US Day)

Kwajalein:

*Bill Robison, Terry Hamilton, Marshall Stuart, Jim Brunk, Steve Kehl, and Frank Gouveia*

Tuesday, April 18 (MI Day)

*Steve Kehl, and Jim Brunk*

Depends on the AMI flight schedule out of Rongelap to Kwajalein and subsequent flight to Honolulu.

*Earl Stone and Leo Migvar*

Tuesday, May 2

Vehicles:

Marshall Stuart, Steve Kehl, Jim Brunk, and Frank Gouveia

Van for April 16. Van will be returned to the airport on April 17.

REQUIREMENTS: BECHTEL/DOE

Bikini Atoll

1. One walk-in freezer for use on Bikini Island and transport of collected samples back to Kwajalein aboard The Great Bridge.
3. All gear and supplies on the barge arriving Kwajalein.
4. All gear air shipped subsequent to barge shipment.
5. Five new tri-walls from Stephan (3 on board, 2 at Kwajalein).
6. Plywood (1/4") to cover tri-walls aboard LCU-2000—3 ea.
7. Coconut sampling lift truck (for use on Bikini).
8. Backhoe for soil sampling.
9. 4 x 4 sampling trucks for field sampling crews (for use on Bikini).

Rongelap Atoll

1. 3 trucks (requires picking up one truck at Bikini) for GPS, gamma spec., and soil sampling.
2. Power for 4 Hi-Volume air samplers and 4 impinger motors.
3. Bunk space for ten people plus Judy, Wayne, and Capelle.
4. Backhoe for soil sampling.



William L. Robison

WLR/rb

cc: Bill Jackson, DOE PASO  
Joesph Shinn, LLNL  
Judy Honda, Bechtel  
Jim Brunk  
Marshall Stuart  
Steve Kehl  
Earl Gilmore

Earl Stone, Univ. of FL  
Lance Yamaguchi, Bechtel  
Terry Hamilton  
Frank Gouveia  
Stephan Notariani, Bechtel